

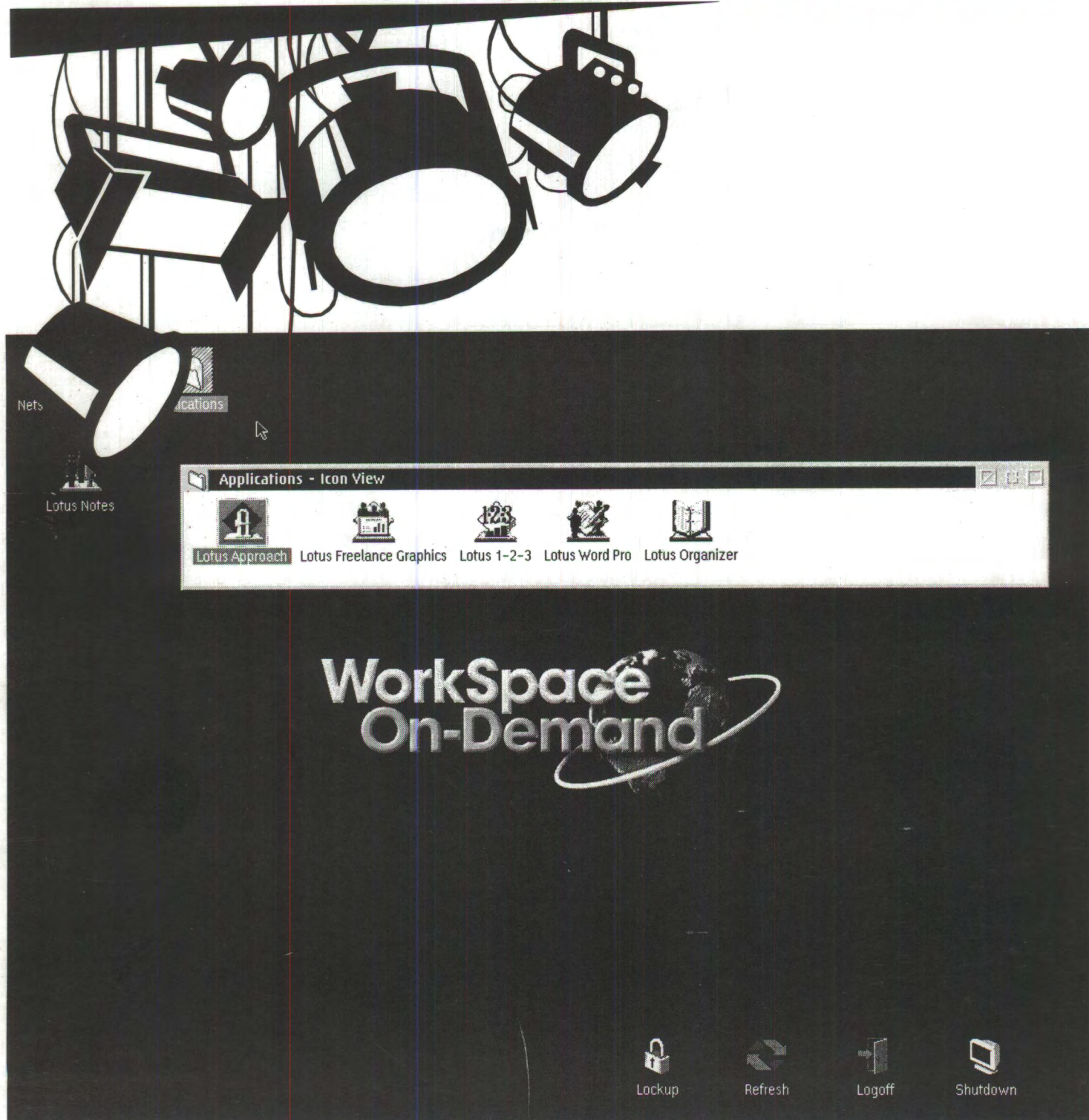
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Phoenix
OS/2
Society

extended attributes

The magazine of the OS/2 community

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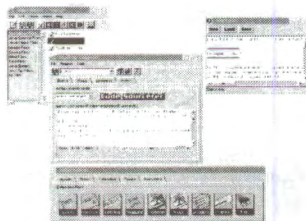
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Waiting for Java

by Bill Schindler, Editor-in-chief

comment

I have a sort of love-hate relationship with Java.

About six months before the Java, excuse me, Warp 4 rollout, IBM started pushing me to use Java. They were convinced that absolutely every piece of software should be converted to Java, post haste. Graphics applications, device drivers, accounting software, it didn't matter. IBM wanted you to rewrite it in Java. Now.

I was working on a speech application at the time, and every two or three weeks I'd hear, "Why aren't you doing that in Java?" I'd usually send them off to find out why IBM's own speech APIs weren't written in Java.

A few months later, I started working on a label application. The second I started designing the application, I knew that I'd soon be receiving bright-eyed over-enthusiastic queries, "You are writing that in Java, aren't you?"

I decided I'd give it a shot. I downloaded the latest version of Java. I pounded around on it and wrote a few command line utilities. That was great. Java let me easily solve some programming problems that would be nightmares in other languages. So, I jumped right in and spent a couple weeks writing prototype code for the label application.

It was slow. Really dead-turtle slow. And, just to round it out, buttons, entry fields, and so forth would shift around, or be drawn oddly, or not work at all. Java just wasn't up to building a large, robust, GUI-based application.

I decided that Java wasn't ready yet. While I was waiting, I went back to writing the label application in C++.

Now for something completely different

Okay, Java wasn't very usable for GUI-based programs two years ago. What about now? Isn't it different now?

Exactly. And "different" is both good and bad.

For example, when Java 1.1 shipped, it broke most of the utilities that I wrote using Java 1.0.2. And almost nothing written for 1.1 runs with Warp 4's default 1.0.2. As a software developer, which version do I choose to develop under?

Although the current version of Java is better, it's still not great. It's still slow. It gulps RAM and CPU. It doesn't play well with others, including other Java applications. And it's still changing faster than I can write and ship a large application.

So, I'm still waiting for Java to deliver before I deliver a Java application.

Espresso disdain

It looks like I'm not alone. I can count on one hand all the major end-user Java applications. Several large development efforts have been "parked" because Java wasn't up to it yet.

IBM did a "Java rollout" instead of a Warp 4 rollout, two years ago. They claimed Java was the future. But how many Java applications do you own? ☹

Phoenix OS/2 Society, Inc

The Phoenix OS/2 Society, Inc (POSSI) is an international organization of computer users with an interest in IBM's OS/2 operating system and related issues.

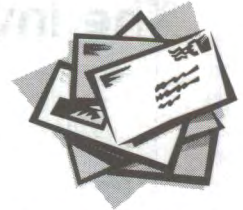
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Letters



Letters to the editor should be sent to editor@possi.org or mailed to the Phoenix OS/2 Society. We reserve the right to edit all letters for content, readability, and length.

Reverse speech

I caught a comment in *extended attributes* about speech recognition.

I am starting a long term project on speech and reverse speech. I selected OS/2 as the best operating system (based on everything you guys have written during the past three years). I've used Windows 3.1, Windows 95/98 and Windows NT, and I've had a fair amount of experience on several other operating systems (usually on bigger systems I could not afford to buy).

I was fascinated, years ago, by the chips TI put out in support of text to speech. Things have come a long way since the old TI-99/4A speech synthesizers. I've just put together a Pentium II, 266 MHz, and as soon as I get past the installation headaches I should be ready for some serious stuff.

A friend of mine out here in San Diego has hit upon something very curious. His name is David Oates. For the past fifteen years or so, he has researched speech and speech patterns. He has found some relationship between normal forward speech and the sounds made by the same

speech played in reverse. Some members of the medical community are seriously considering him for nomination for the Nobel prize in Medicine based on his research thus far.

It is my intention to use OS/2 Warp 4 in developing software to assist in the interpretation of reverse speech. No matter what happens, it should be a whole lot of fun.

Rod Van Orden

Scrollpoint mouse

I've been enjoying POSSI and *extended attributes* for a year or so and decided to make some input.

I just got an IBM scrollpoint mouse, and I downloaded the IBM [OS/2] drivers. This thing is great. It scrolls in all my programs and on Web pages. I can leave the mouse pointing at the action icons across the top of a program, and still smoothly move up and down through text and other pages. It's a great deal, worth the \$39, including shipping and handling. Highly recommended.

Matt Walsh

In memory of

Father Winston F Jensen
Dublin, Texas

In memory of

Frank Pizzo
Glendale, Arizona

SharewareDevelopers.com launched

press release

QuikLink Interactive, Inc has launched SharewareDevelopers.com. Dedicated to bringing software developers the information and resources they need to succeed, it will become the most complete Web site of its kind on the Internet.

"The problem for independent software developers is that related resources and needed information are scattered about various Web sites around the Internet," explains QuikLink Interactive president Hunter Gordon. "That is why we plan to bring this information and resources together on one Web site."

SharewareDevelopers.com offers these developers a faster and better way to locate the tools, information, and utilities they need to succeed.

"Developers are encouraged to contribute," says Gordon. "In addition to our various discussion forums, users may add listings for tools, source code, controls, utilities, related sites, and even their own programs. The Shareware Soapbox also gives developers the opportunity to contribute articles for publication."

The Web site also offers developers featured articles from top members of the shareware community, free Web browser based email, a software submission wizard, an online book store in association with Amazon.com, an online tools and controls store in association with VBXtras, and more. ☺

The invented customer

by Esther Schindler

I think it's a girl thing. Somewhere around age 13 or 14—maybe it's a little younger, nowadays—girls notice boys, and they yearn for a boyfriend. But, like dogs who chase cars but wouldn't know what to do if they caught one, young girls aren't quite ready for a real relationship.

One young girl might engage in giggly worship of a rock star or an actor. Another "invents" an inaccessible boyfriend, who exists halfway between imagination and reality, created and fed by her fantasies, her loneliness, her raging hormones, and her indirect flirtations ("did he look at me in homeroom, today?").

My not-quite-real boyfriend was named Noah Schwartz, and the poor kid was unlucky enough to not-notice me when I was 13. I think I made his life miserable. In high school, my best friend Irene took a circuitous route up and down stairs between classes, on the off-chance that Lonnie Liebowitz would smile at her when they passed in the hall. Her day's success was based on the results. With hindsight, I think I can safely assert that Lonnie never *did* know Irene existed.

Fortunately, most of us girls outgrow the invented relationship within a couple of years. Otherwise, our parents would surely kill us by our fifteenth birthday.

Unfortunately, IBM doesn't seem to have outgrown its own version of an invented, imagined relationship.

The target market

I've been writing about OS/2 for more than five years. In that period of time, I've encountered a very broad range of people who have been involved with the OS: the corporate students to whom I taught OS/2 for Learning Tree, the computer press, IBM executives, OS/2 ISVs, IBM's development staff, end users in POSSI, and IT staff who have to keep the computers running. Aside from my ongoing effort to collect useful demographics about the OS/2 community in all its guises, I probably have a good sense of the opinions and behavior of a decent cross-section of the OS/2 market—arguably, better than anybody else does.

I should be able to say, "...better than anybody except IBM," and I'm upset that I cannot, in good conscience, do so. IBM should know more than I do. But IBM doesn't look at the OS/2 market in terms of "who are our customers," but rather, "what can we say to our target customers." And, over time, their definition gets narrower and narrower. It's as if they stopped looking out the window to view the market landscape, and now they just look out the security peephole in the front door, insisting that what they see, in their limited vision, is all there is—and all they want. And all they ever wanted.

Right. And Lonnie *did* smile at Irene.

Whenever I speak with IBM executives, they remind me that their target customer is the large corporation, probably in banking, insurance, or manufacturing, who is committed to IBM and has a legacy commitment to OS/2. The "legacy" statement is relatively new; even in press briefings, IBM no longer pretends that they expect (or want?) any new OS/2 sales. One OS/2 ISV described this as "the 'minimize your losses' school—in a word, defeatists."

WSOD and Aurora—Dick Krueger provides technical details about these new server offerings elsewhere in this issue—are targeted at existing OS/2 (corporate) customers whom IBM wants to transition to network computing. They carefully omit mentioning that any transition to something new is a transition away from something else.

For some reason, IBM execs get annoyed when I point this out. I'm not sure if I'm supposed to be participating in a tacit agreement to ignore the obvious, but if so, someone forgot to give me the rule book. Not that it would matter; I've always been here to represent the user anyway. The last I knew, the definition of "customer" means "someone who gave you money in exchange for goods and services," and the end users who adopted OS/2 qualify for that definition no more-or-less than does a big bank. I refuse to surrender to IBM's redefinition of "customer" as "someone we want to have as a customer in the future, preferably not using OS/2 on the desktop." IBM keeps targeting the people they (claim to) want, at the expense of the people they have.

It's not true

Maybe this would be forgivable, if only IBM's imagined customer actually existed. They paint a pretty picture of corporations committed to IBM, relying on IBM for services, mainframes, and other big ticket items, of which OS/2 is just a part. Surely, some do meet that definition. Unfortunately, to a very large degree, IBM's "customer" is as much an invented construct as is Irene's torrid love affair with Lonnie. And IBM works just as hard to avoid confronting the truth.

IBM's OS/2 marketing—such as it is, or ever was—has been to the corporate customers of whom they're sure. The problem is, their surety has little to do with reality. At the OS/2 Warp 4 rollout, two years ago, IBM invited some prominent OS/2 ISVs to join the IBM executives for lunch, along with several corporate customers. One OS/2 ISV who attended told me that, during that luncheon, two or three corporate customers told him flat-out that they were mov-

ing the business to Windows NT. Yet those were the loyal customers whom IBM invited to the OS/2 Warp 4 launch.

IBM executives insist, to me, that they listen to their customers. However, mounting evidence demonstrates that they do no such thing. IBM knows nothing about how OS/2 is used in the real world, and it resists any opportunity to do so. POSSI members may remember my interview with Donn Atkins, who was surprised by my question about the percentage of OS/2 systems with a scanner attached, saying, "I don't know. Do you really think I should [know]?"

In "explaining" the reasons that IBM wouldn't provide formal support for Warpstock, an IBM representative tried to justify the decision by saying Warpstock attendees weren't part of the target market. But she didn't know the demographics of the attendees; no one does. I've corresponded with plenty of those who attended last year, and people who plan to attend the event in Chicago this month, and I have a pretty good guess at the breakdown. But IBM doesn't—and, to the best of my knowledge, they've never so much as asked. Yet, they'll make loud assumptions, with no data whatsoever.

IBM's customer "research" comes only through its sales staff. However, sales people are the most competitive life forms on earth. You'll never hear a salesperson talk about a failure, about a lost deal, or about an unresolved misunderstanding—certainly not to his superiors. When an IBM salesperson meets with a target customer, he has a vested interest in hearing (and later reporting) only the good news.

That's how sales works in any business, but it's not a good measure of market demand. Especially if the salesperson recommends his own personal favorite to the customer. And a high percentage of IBM sales staff have been steering "target customers" away from OS/2 for years.

Even dedicated IBM sales staff who promote OS/2—I've known quite a few great representatives, over the years—interact primarily with management. A manager who's being wined-and-dined will rarely be rude enough to give an honest opinion, for the same reason she tells a failed job seeker, "You're overqualified." The IBM salesperson is even less likely to deal with the people, out there in the maze of cubicles, whose responsibility it is to deploy the technologies chosen by the wined-and-dined decisions makers.

Like the 14 year old in love with a self-created vision, facts can't be permitted to intrude. Maybe that's one reason that IBM's third party support is so abysmal, and why it has managed to stay utterly unaware of ISVs and other business partners. I don't mean neglect; neglect implies that you know they exist, and you're actively ignoring them. IBM doesn't even register that ISVs exist. I asked IBM's Ken Christopher how the company was working with OS/2 ISVs to encourage them to develop for Aurora and WorkSpace On Demand, citing one well known developer who'd said, "IBM doesn't call me anymore." The IBMer responded, with some heat, insisting that he *always* returns phone calls. Perhaps that's so, but there's a big difference between "I call you" and "I return your phone call, after you call me." I've seen this particular ignorance demonstrated repeatedly, in the last five years. (It makes me wonder how these guys ever got a date.)

And it doesn't even work

I don't know whether to be amused or disgusted, but their tactics aren't working. According to the survey I reported a few months ago, 95% of existing OS/2 users expect to be using the operating system by this time next year. So much for successfully being "transitioned" to something more palatable to IBM's corporate strategists.

Yet the long term IBM customer, the banks and insurance companies and oil business and all the rest, drop IBM and move to its competitor—in large part because they're offended by IBM's lack of commitment. "If they don't support their own products," corporate employees have told me again and again, as they prepare to switch to all-Microsoft solutions, "why should I support them?"

Because IBM is so out of touch with the customers they claim to target, the company is apt to go into another tailspin. And, I'm certain, they'll be mystified at why it happened. (You'd be amazed at some of the reasons that IBMers give for why OS/2 "didn't make it." In short: IBM really believes that they gave the marketing a good shot.)

What's saddest about the entire situation is that the solution to the problem is so simple. To resolve the situation, all that IBM has to do is listen—sincerely listen—to what their customers think.

Do you believe they will? ☹

Esther Schindler is program chair of the Phoenix OS/2 Society. In real life, she's Technology Editor for ZD's *Smart Reseller* magazine. You can reach her at esther@bitranch.com.

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Can we talk?

by Judy McDermott

.two warped

Have you ever wanted to talk to people around the world? You can do it! Just boot up your PC, get the appropriate software, create a connection to the Internet, and start talking. Er, I mean typing.

IRC, Internet Relay Chat, was developed by Jarkko Oikarinen in Finland in the late 1980s. It was originally intended to work as a better substitute for "talk" on his bulletin board. IRC's major advantage over talk programs is that several persons can simultaneously participate in a discussion in a *channel*, or even in multiple channels.

IRC soon became very popular as a real time means of communication via the Internet. People from all over the world can be found over IRC. It's been used extensively for live coverage of world events, news, sports commentary, etc, and it's an extremely inexpensive substitute for long distance calling. IRC gained international fame during the 1991 Gulf War, when the IRC was used to carry live coverage of events.

Pick your flavor

You will need an IRC client. A variety of IRC clients are available, for multiple operating systems. You can use text based clients, entering all commands from the keyboard. PM/GUI clients allow you to enter keyboard commands, or to use mouse button click on icons to carry out the desired action. With the required version of Java installed on your system, you may also use a Java client. There are also Java clients that can be called from your browser, upon connecting to a site in which the network administrator has set up a Java IRC client-server.

You'll find a selection of IRC clients, daemons, servers, scripts, and robots at www.gt-online.com/~bri/irc_clients.html. If you need assistance, feel free to e-mail me.

Destination unknown

There are several IRC networks. The most popular are Efnets and Undernet. These servers are up and running seven days a week, 24 hours a day. On these networks, someone is almost *always* available.

EFNet is the "original" IRC, with lots of servers and many users around the world. If you're interested in talking to people in other countries, and you like occasional chaos, EFNet is your place.

Undernet was designed as the "new and improved" IRC. Most Undernet server operators know each other, and they try hard to make Undernet a pleasant experience. The channels seem to be friendlier and are less concerned with turf battles.

Business or pleasure

There are literally thousands of IRC channels. If you can't find what you're looking for, you can create your own channel. In no time, people join you in your channel *Topic* of discussion.

IRC brings together people with a common interests, and lets them exchange ideas and information that might not be readily available elsewhere. One example is support groups. There are folks who need and want support, but can't bring themselves to talk to someone face to face; with IRC, they can anonymously express their feelings, and obtain support from those that share a common ground—or they may just want to sit-in and listen to others.

On a lighter note, you might want to head to the #os/2 channel, to discover what folks say about the latest fixpack or to obtain help getting OS/2 installed on that 5.1G hard drive.

Besides day-to-day chitchat, IRC has become a medium for businesses. It's not only to communicate privately, but can include the public in scheduled IRC sessions. How about this one: "The First VP and Head of Prudential Securities' Equity Focus Group takes your questions and offers his opinions on which stocks to hold during a market downturn." Or what about a chat with The Principal Secretary to the Prime Minister of India, Brajesh Mishra? The list goes on and on.

Why me?

I became interested in IRC in 1994, when I installed OS/2. Efnets' #os/2 channel was an excellent resource for help with an operating system about which I knew nothing. Since then, I've made many online friends, a few of whom I had the pleasure of meeting at Warpstock '97—and now I find pleasure in helping others.

When we founded VOICE, a virtual OS/2 user group, I suggested that we conduct meetings on IRC. I set up an IRC server, created the #voice channel, and we were instantly able to reach out to the OS/2 community to provide support and information.

This worked well until my ISP decided to drop connection. Everyone was left out there in cyberspace while I got back up and running, so they could reconnect. Now that I put my IRC server on the Webbnets network, changed ISPs, and got a 128K ISDN line, all is well on the home front.

Behind the scenes

Having attended a few VOICE meetings, Felix Cruz requested a #warpstock channel. A group of people, many of whom had never met personally but were united by

their belief in OS/2 and the need to reach out and bring together the OS/2 community, formed a steering committee to plan the event of the year, Warpstock '97. The entire planning took place on the Internet via e-mail and IRC. Look where that got us!

Warpstock '98

The OS/2 users' event of the year is upon us. Warpstock '98 will be held October 17-18, 1998 at the Wyndham Hotel in Itasca, IL.

This year's event brings out even more vendors, developers, speakers, and OS/2

users than last year. Several vendors ran out of software and brochures very early last time, so I'm sure they'll be prepared for the anxious crowds this year.

Several speakers are scheduled, offering a wide range of topics. There should certainly be something of interest for everyone. Full details can be found at www.warpstock.org.

The Phoenix OS/2 Society (POSSI) will have a booth at Warpstock again this year. Last year, copies of *extended attributes* sold like hotcakes, as did the POSSI polo shirts, and approximately fifty new members

signed up. This year even more goodies will be available. Hopefully, if you aren't able to attend the POSSI meetings due to location, you can attend Warpstock, and have the opportunity to meet some of your fellow members.

See you at Warpstock '98! ☺

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IBM's sneak peek: servers with a smile

by Dick Krueger

feature

I feel like Steve Martin's character in the movie, "The Jerk," shouting, "The new phone books are here! The new phone books are here!" But I'm having trouble finding my name in the new listings.

On a press tour in mid-September, IBM provided me with a tantalizing glimpse into the next generation of OS/2 products. They include some minor improvements in Workspace On Demand (WSOD), a new WSOD client, and very intriguing new technology in Warp Server. What's missing is a new Warp client; IBM says they have no plans to produce one. Does that mean all is lost for those who seek a robust workstation platform? Maybe. Maybe not. I'll come back to that question later.

First, let's take a look at the new stuff

Workspace On Demand, V2

Workspace On Demand Version 2 is scheduled to ship this month. The biggest changes in this release are on the server side.

If you haven't been paying attention, here's a short WSOD primer. WSOD consists of a client OS environment (the WSOD Client) and a set of server-side utilities to manage that environment (the WSOD Manager), which run on Warp Server (and presumably Aurora). At the server, the system administrator uses WSOD Manager to manage client images, control user access, and define client behavior. At a workstation, the user boots the client image from the server. The WSOD client image allows the user to run OS/2, DOS, Windows 3.x, and 100% Pure Java applications. If Citrix WinFrame is available, the user may also run 32-bit Windows 95/98 applications.

In the new version, IBM has enhanced something called a "machine class." A machine class is a template for a fully configured machine. The template defines a particular machine model, plus the various configuration files and device drivers that may be needed for different variations of that model. WSOD ships with several predefined classes and the administration can add new ones. Machine classes make it easier and faster for system administrators to define a new system.

The WSOD Manager also provides tools for the system administrator to define users and the set of applications each user is allowed to use. No matter which computer a user logs in with, the WSOD user sees the same desktop, the same set of applications, and accesses the same user files.

Sometime in 1999, IBM will begin shipping another WSOD Client. WSOD for Win32 (they haven't determined a real name yet) will provide a different type of client

image, which will run only Win32, Win16, DOS, and Java applications. The Win32 client image will require a local hard drive for the workstation; the current WSOD Client does not.

A given server may support both types of clients. A client machine may run either WSOD or WSOD for Win32, but not both simultaneously.

If you're already using WSOD, enhancements in machine class management and the new Win32 client may be of interest to you. If you're not using WSOD, but you have a number of user workstations to administer, you might want to take a good look at WSOD.

On the other hand, if you use OS/2 the way I do, you're probably much more interested in the new Warp Server, and what it may portend for future stand-alone workstation support.

Aurora

The new version of OS/2 Warp Server (code named Aurora) is scheduled to enter beta testing this month. General availability is scheduled for sometime early in 1999. Aurora has a number of exciting new features. A couple of them prompted me to say, "Be still, my beating heart!" But I'll start with the less exciting stuff. Less exciting to me, that is—you may well feel differently about it.

Aurora is fully "Year 2000 Compliant."

Aurora supports the new Eurocurrency. It also sports a slick new graphical interface for defining and modifying Native Language Support (NLS) locales. There's a notebook for each locale (read "country" in most cases) that covers just about all the text, number, and currency formatting requirements you could conceive of. You can drag and drop a NLS locale definition onto an enabled application, just like dragging and dropping color and font definitions.

Aurora includes Netscape's Communicator 4.04 browser.

If you're interested in hosting a Web site, Aurora includes both Lotus Domino Go Server and WebSphere Application Server 1.1.

Do you suffer from unsightly dandruff? Are you required to manage Windows NT 4.0 servers? Then the new, improved OS/2 Warp Server with "NT server management" is for you! Right from the keyboard on your Aurora Server, you can manage all those Windows NT servers that have been turning your hair gray! You can create, update, and delete user IDs, passwords, and groups, and keep them synchronized with Windows NT servers on the same network. Users need to log on only once to be able to access all authorized resources on all servers. Of course,

you still need to be physically present at the Windows NT server when it needs to be rebooted.

If you have SCSI devices, or Ethernet or token ring networks, then you may be interested in the Intelligent Input/Output (I2O) support for SCSI and LAN devices. IBM says "...as long as a device driver supports the I2O specification, OS/2 Warp Server will support that device driver." That means never having to wait for device driver support—assuming that the device driver makers cooperate.

SMP support will be available in Aurora, but IBM has not yet decided whether it will be standard or optional.

Aurora also now includes Network File System (NFS) for sharing files across networks.

Logical Volume Management

Well, enough of the mundane. Let's get to the stuff that causes heart palpitations. They are (drum roll, please) Logical Volume Management (LVM) and the Journaling File System (JFS). If you run a file server, if you support databases, heck, if you're just trying to manage a workstation with constantly changing disk storage needs (developers, take heed), then LVM and JFS are for you. Together, they should take most of the drudgery (and a lot of the fear and heartache) out of managing disk storage.

LVM does for disk storage what the URL has accomplished for Internet nodes. It separates the logical (www.possi.org) from the physical (207.100.156.214). If you move www.possi.org to a different IP address, POSSI members can still find it. With LVM, you can create a logical volume (say, G), move it to a different physical drive, and still find it as drive G. IBM calls this "sticky drive letters."

LVM also lets you expand the size of a volume on the fly—without rebooting. A logical volume can span multiple physical partitions. If you fill up a logical volume and want to make it bigger, just take some available free space out of any partition on the physical disk, and add it to the logical volume. Then keep running—no reboot required. You don't have any free space left on that physical disk? No problem. A logical volume can also span multiple physical disks. Take some free space out of a parti-

tion on another physical disk; still no reboot is required.

LVM is sort of like FDISK on steroids. Never again need you face the difficult problem of running out of space on G and being forced to move an application to H, only to find that the program no longer runs, because the installation process hardwired G into the installed application components.

File systems

You have to use the Journaled File System if you want to take advantage of all the things LVM can do. You can still have FAT, HPFS, and HPFS386 partitions, but they won't be dynamically configurable the way JFS is. A JFS partition can't be made bootable, so you'll still need at least one non-JFS partition to boot the OS.

JFS for OS/2 is derived from the journaling techniques used on IBM's AIX system. According to IBM, JFS is designed for faster performance, higher capacity, improved scalability, and faster recoverability.

I haven't seen any benchmarks, nor had the opportunity to make hands-on comparisons. However, I expect that JFS performance will at least be on a par with HPFS386. Certainly JFS has the potential to do even better than that. For instance, JFS offers something called "sparse file" support. Rather than pre-allocating all the space defined for a file, JFS allocates space for a block only when it's actually written. For instance, you might have a database file where real data occupies only a small fraction of the actual file size. The data is spread in small patches across the file space leaving many gaps. JFS allocates only the blocks that actually contain data. A 200 MB file that has only 10% of its blocks actually filled with data may only need 20 MB of actual disk space.

Since a JFS volume is not limited to a single physical disk, capacity is greatly expanded. A JFS volume may be up to 2 terabytes in size, and a single file may itself be up to 2 terabytes. In fact, if it's a sparse file, the file size may be greater than 2 terabytes as long as the number of used blocks doesn't exceed 2 terabytes.

The way that OS/2 (and other OSs) work now, a single file update may require several physical I/O operations to complete. A system failure in the middle of the process

leaves the file system in a corrupted state. During system bootup, CHKDSK has to examine the entire partition for inconsistencies, and try to repair any problems it finds. One of JFS' features is that it maintains a log or journal (hence the name) of all file system update activity. In the event of a system failure, JFS can very quickly—almost instantaneously—determine the status of the file system. If recovery is required, JFS can typically restore the file system in a matter of seconds or minutes.

All in all, I'd say Aurora looks like major step forward in server technology for the Intel platform.

Beyond servers

That's all well and good, you say, but what about a new Warp fat client? Perhaps you're running a single workstation at home and a small network at the office, and what you really want is a state-of-the-art full-featured Warp client that can run a stand-alone workstation or small peer-to-peer network. IBM says: Sorry, you're not our target market, and our target market isn't asking for a new Warp fat client.

Does that mean we all have to switch to (gasp!) Windows? Not yet, thankfully. At least for now, Warp 4 still works, and IBM is providing fixpacks. But sooner or later, that hardware you're using will quit or become inadequate. Will Warp 4 (with the latest fixpack, of course) run on the new machine you get from Gateway? If not, what can you do? If IBM doesn't come through, you can switch to Windows (or Linux or BeOS or something else)—or, if IBM hasn't priced it out of range, you can upgrade to Aurora.

Run a server for just me? It's not as crazy as you might think. The hardware requirements aren't a whole lot more than what you have now. And you don't absolutely have to use every bell and whistle in the box. Don't need NFS? Don't install it. Don't need JFS? Don't define a JFS partition. Don't have a Windows NT server to manage? Don't install Windows NT management support.

Who knows? Maybe IBM can be convinced to sell you a copy of Aurora, without some of the network support features, for a more attractive price. Maybe they'll call it "Aurora Light."

We can only hope. ☹

Powerboot 2.1

by Dr Allie Martin

review

Bluesky Innovation's Powerboot is a great tool for those who use multiple operating systems and especially those who do not install the operating systems all at the same time. With it, you can install various operating systems and boot from each, in ways that you cannot normally accomplish without the use of Powerboot.

Powerboot is compatible with all PC operating systems, including our beloved OS/2. It is purely a boot manager and does not offer features like those found in its peer System Commander—which costs significantly more. Most of us who use and install multiple operating systems use Partition Magic, which includes many of these additional features anyway.

Installation

Powerboot may be purchased electronically, either from BMT Micro or via the OS/2 Supersite's rapid Internet purchasing facility; it comes as a 32KB zipped archive. Powerboot installs on your first hard drive but does not require its own partition, nor does it need a FAT formatted partition on which to be installed. The installation executable is DOS based, however; you run it either by booting to DOS or booting with a DOS boot diskette.

Installation on my first hard drive, which is fully HPFS, was very easy and quick. I unzipped the archive on a diskette, booted with a DOS diskette, ran the install executable on the installation disk, and followed the simple instructions.

Uninstalling was as easy as selecting "uninstall" from the first popup menu.

Features

Powerboot is indeed a lean and mean boot manager. It lacks the frilly appearance of System Commander, in fact looking more like OS/2's boot manager in simple layout,

but it comes packed with very useful features.

Powerboot may be run in simple or expert mode. It also has a quiet mode, where you are not presented with a boot menu but instead see the copyright statement. The quiet mode can be interrupted

readily by pressing the spacebar.

Powerboot's features include:

- ☐ The ability to hide/unhide partitions on the fly as you boot up. There is no need to run another program to hide or unhide partitions.
- ☐ A one touch option to configure your system to update an operating system.

- ☐ A one touch option to configure your system to install an OEM version of an operating system (e.g. Windows 95 OSR2). Very often, these OEM versions will not install if they detect another OS on the system.
 - ☐ Giving names to your partitions like "Win95 OSR2" or "MSDOS 6.22" for easy identification
 - ☐ The ability to boot from any one of 63 partitions on any drive. This is only limited by the ability of the OS to be booted from a drive other than C.
 - ☐ Once the operating system is loaded, Power Boot does not occupy any memory
 - ☐ Not requiring any configuration. It is *install and play!*
 - ☐ Password facilities for security with save last boot ability.
- Three other features require special mention and were absolute winners for me. These were the DOS swap drive, Win 9x swap drive, and OS/2 boot drive letter features.

The DOS swap drive makes you able to boot an operating system from a drive other than the first one, even if the OS needs to boot from partition C: (such as DOS/Win3.x). It does this by logically swapping the drives, so that the operating system to be booted thinks that it is on the first drive and hence on partition C:. If you get a new hard drive, you can then install it as the first hard drive and, with Powerboot, still be able to boot your old DOS installation on your old drive.

The Win 9x swap drive feature provides the ability to install on and boot from a second, third, or fourth hard drive. This means that you can install a second hard drive leaving OS/2 on your first drive and then going ahead and installing as well as booting Win 9x from this new drive.

Adding new drives and creating new partitions can unexpectedly change drive lettering making your OS/2 installation unbootable. Hence the OS/2 boot drive letter feature, which allows you to boot OS/2 from an HPFS partition using any drive letter you need to. This overrides the default drive letter allocation.

Verdict

Powerboot is an excellent value. It provides great loopholes and removes hassles that would normally exist for someone installing multiple OS's, creating partitions, or adding hard drives to their system, especially if the computer is already up and running with one or more operating systems.

So, if you find yourself spending a long time planning how you install another OS on your system without one getting in the way of the other, then Powerboot is a great solution. ☺

Dr. Allie Martin is an end user of OS/2.

Powerboot V2.1
\$25.00
Evaluation/demo version available

BlueSky Innovations, LLC
www.blueskyinnovations.com

Available through BMT Micro

A Graham of prevention

by Esther Schindler

By October 13, you're likely to be packing your bags for Warpstock, which begins just a few days later. But leave them alone for one evening—we have a special guest coming into town.

On his way to exhibit at Warpstock, Chris Graham, the author of WarpSpeed Computers' The Graham Utilities for OS/2, will be the guest speaker at the Phoenix OS/2 Society's general meeting on Tuesday, October 13. Chris is apt to be suffering from terminal jet lag on his way from Australia to Chicago, but he'll show off the newest version of his utilities, V2.1.3.

what

- ▶ Chris Graham showing Graham Utilities 2.1.3

where

- ▶ Mtn Preserve Reception Center
1431 E Dunlap
Phoenix, Arizona

when

- ▶ Tuesday, October 13, 1998
- ▶ 6:30pm: Q&A session
- ▶ 7:00pm: Regular meeting

A treasure chest

The Graham Utilities for OS/2 are an invaluable treasure chest of utilities that every OS/2 system needs. They are the largest suite of OS/2 utilities available, featuring close to 80 (count 'em eighty) different programs and modules. From complete system recovery to Workplace Shell extensions and Presentation Manager applications, this suite has it all. With full HPFS, HPFS386 and FAT support, your file systems can be defragged or undeleted as

brings the same functionality to OS/2 Warp 3. In version 2.1.3, the WPSoundPalette class can import and export sound schemes, so you can share your favorite sound schemes with your friends!

Also new with V2.1 is a presentation manager application, Task Manager for OS/2. The application, which runs with multiple notebook pages, enables you to kill errant applications, as well monitor CPU and memory performance. It's SMP compliant as well, so you can see what your multiple CPUs are doing.

The Graham Utilities for OS/2 are the largest and most comprehensive suite of OS/2 utilities available. They are also the only ones that are still being updated and developed. The software includes a 424 page manual, and you also have it in soft copy in four different formats (HTML, INF, PS, and PDF).

Come along and see Chris show them at their best.

If time permits, Chris may also give a pre-alpha sneak preview of his next project: The RA Project, which he describes as, "destined to shake the Internet."

When and where

The general meeting is held on Tuesday, October 13, at 7:00pm at the Mountain Preserve Reception Center, 1421 East Dunlap. The random access Q&A starts at 6:30pm, and arriving early gives you a chance to catch up with your friends and tell Aussie jokes. ☺

necessary.

V2.1 includes Workplace Shell applications as well as a Presentation Manager program. The WPS applications include the GUDisk class, that enables users to selectively perform a View, Edit, Defragment, or Undelete on their drives, at the simple click of a button. A WPSoundPalette class lets you manage OS/2 Warp 4's sound schemes, and



Coming events

A list of events scheduled by the Phoenix OS/2 Society and other OS/2 user groups.

October 1998

- 5 Magazine submission deadline for November issue. Articles should be sent to editor@possi.org. For other arrangements, call 602-585-5852.

October						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

- 6 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Mike Briggs. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
- 6 HOW (How OS/2 Works) GIG. Meeting is 6:00pm to 8:00pm. Coordinator Lyle Wilson. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
- 13 General meeting; The Graham Utilities, presented by Chris Graham, from Australia. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.
- 16 Warpstock '98. October 16-18 in Chicago, IL. See the Warpstock Web site at www.warpstock.org for more information.
- 24 Board meeting and magazine prep. Meeting is 10:00am to 1:00pm. Eat a brunch, learn about the inner workings of the Society, and help get extended attributes ready to mail. Location: Bill and Esther Schindler's house in north Scottsdale, 9355 E Mark Lane. Call 585-5852 or send email to esther@bitranch.com for directions. Remember to bring a potluck dish to share, too.

November 1998

- 3 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Mike Briggs. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.

November						
S	M	T	W	T	F	S
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15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

- 3 HOW (How OS/2 Works) GIG. Meeting is 6:00pm to 8:00pm. Coordinator Lyle Wilson. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
- 5 Magazine submission deadline for December issue. Articles should be sent to editor@possi.org. For other arrangements, call 602-585-5852.
- 10 General meeting; idot.com showing OS/2-ready hardware. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.
- 16 Comdex, through November 18. Las Vegas, NV.

- 28 Board meeting and magazine prep.

December 1998

- 1 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Mike Briggs. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.

December						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

- 1 HOW (How OS/2 Works) GIG. Meeting is 6:00pm to 8:00pm. Coordinator Lyle Wilson. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
- 5 Magazine submission deadline for January issue. Articles should be sent to editor@possi.org. For other arrangements, call 602-585-5852.
- 8 General meeting. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.

- 26 Board meeting and magazine prep.

January 1999

- 5 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Mike Briggs. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.

January						
S	M	T	W	T	F	S
						1
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23	24	25	26	27	28	29
30	31					

- 5 HOW (How OS/2 Works) GIG. Meeting is 6:00pm to 8:00pm. Coordinator Lyle Wilson. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
- 5 Magazine submission deadline for February issue. Articles should be sent to editor@possi.org. For other arrangements, call 602-585-5852.
- 12 General meeting. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.

- 23 Board meeting and magazine prep.

Meeting locations

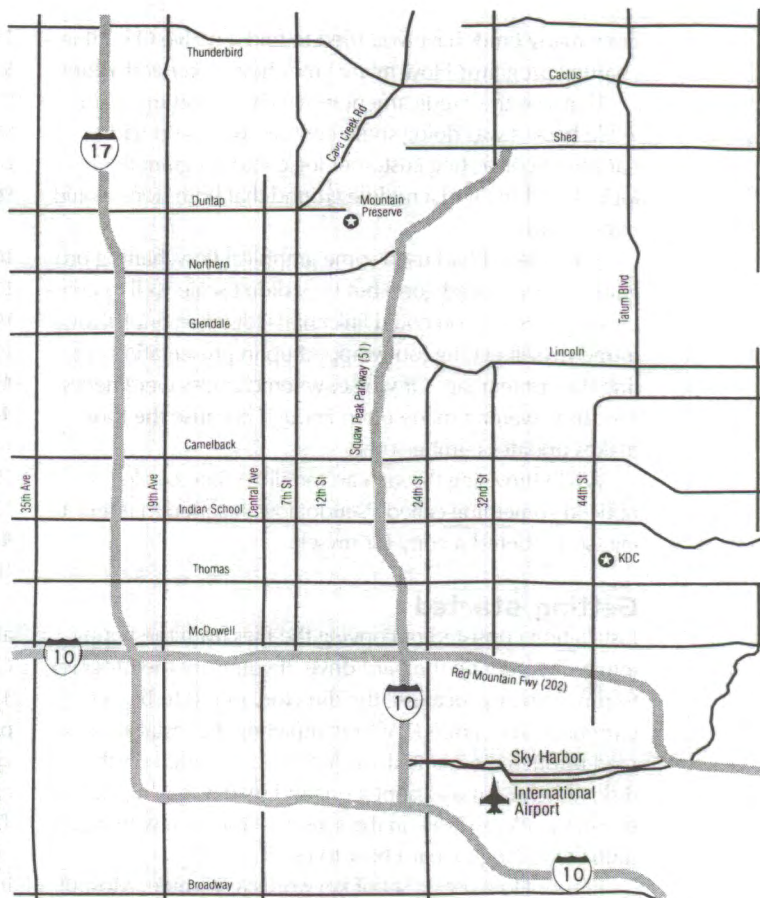
Directions to meeting locations.

General meetings are held at the Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.

From the Black Canyon, exit at Dunlap and head east. From the Squaw Peak, exit at Northern. Go west to 12th Street, turn right, go north to Dunlap, turn right, and it's two blocks up on the right.

The "How OS/2 Works General Interest Group" and the Internet SIG (net.sig) meet at Knowledge Development Center, 2999 N 44th St, Suite 400. That's just north of Thomas, in the building with the green dome. Plenty of free parking is available in the garage behind the building. ☺

If the mailing label on the back cover says "sample" then this may be the only copy of *extended attributes* that you will ever receive. If you want to keep getting the magazine (and receive all the other benefits of membership), you must join! A 12 month membership in the USA is only \$30. (See the form for membership pricing in other areas.) Tear out the application, fill it in, and mail it with your membership fee today!



SIG news

net.sig

by Mike Briggs

At the last net.sig meeting we discussed the ins and outs of Internic and changing domain name registrations. There are various forms online for use in changing any aspect of your domain name registration.

Duane Pruett then began a discussion of HTML coding to put together a basic Web page. This will continue next meeting and Duane plans to use HTML Studio to code the pages. Our intent is to eventually have family Web pages started for some of our members who want one. ☺

HOW (How OS/2 Works) GIG

Currently, the HOW GIG's meetings are combined with the net.sig. We've heard from HOW GIG leader Lyle, and he has several great meetings planned.

Keep watching here and on the Society's calendar (www.possi.org/ca1.htm) for the latest information. ☺

Flowcharting with PseudoFlow

by Richard Knapp

review

How many times have you tried to find a native OS/2 flowcharting program? How many times have you needed one?

That was the predicament in which I found myself, a while back. I was doing some contract work and had a hard time converting customer logic into program flow logic. I couldn't find a middle ground that both sides would understand.

In the past, I had used some graphical flowcharting programs. They looked good but they didn't scale well to complex logic. Sure, you could link charts together, but I always found myself getting too wrapped up in presentation, letting the content lag. Or worse, when changes were necessary, they weren't made often enough because the tool makes updates cumbersome.

While browsing through an Indelible Blue catalog, I noticed something called PseudoFlow. It sounded interesting, so I ordered a copy for myself.

Getting started

Installation consisted of copying the files from the floppy into a directory on the hard drive. If you want the program to run from any location, the directory needs to be in the current path or added. After completing the installation, I read through the manual, an ASCII file provided on the disk. (It helped me to print it out and read it; my highlighter doesn't work too well on the screen.) I tried a few things. It didn't take long to learn how to use it.

PseudoFlow uses a set of keywords as a guide. Most of the words are similar to programming words (begin, end, if, endif, do, and enddo). However, the standard "case" or "switch" statement was renamed to "casentry." The documentation says this is to prevent confusion between pseudo code and real code. It also removes any language dependencies so users aren't seeing code, they're just seeing text. This is very nice when they are proofreading logic

and program flows for you.

PseudoFlow also reformats the code to make it easier to read. Indention is done around key statements and line numbers are added. The indention is very nice but not a must have.

A number of things

The line numbering is very powerful. It shows you to which line the "code" jumps.

For example, if I'm writing a program with a login requirement, I would type in the following:

```
BEGIN Main Program
Login User
```

```
IF Login valid
Show main screen
ELSE Login not valid
Show error screen
ENDIF
END Main Program
```

After running it through PseudoFlow, I get:

```
100 BEGIN ◀107▶ Main Program
101 Login User
102 IF ◀104▶ Login Valid
103 Show main screen
◀TO 106▶
◀FR 102▶
104 ELSE ◀106▶ Login not valid
105 Show error screen
106 ENDIF ◀102▶
◀FR 103▶
107 END ◀100▶ Main Program
```

The lines are numbered on the left. The line number after BEGIN shows you where this block ends (line 107). Conversely, the END shows where the block began (line 100). The TO and FR lines show jumps in the flow of the program. After "Show main screen" completes, the program goes to line 106. If the IF on line 102 is false, the code jumps from line 102 to just in front of line 104 (ELSE). This is where, on graphical flowcharts, you would have to connect lines. Here, it's represented in simple text. Most importantly, it's maintained by PseudoFlow, not by you. As your code changes, PseudoFlow reformats the line numbers and all "pointers."

This type of format works well for case or switch statements. And it works well when using function calls.

Cool. What's next?

Let's break up the Login User statement a little bit, so it does more. Take a look at the code in Listing 1.

A subroutine was added to handle the login. Line 101 was split into two lines: one to show the jump out of the flow, the other to show the jump back into the flow. In this case, a call to "Login User" makes the flow jump from line 101 to line 109. Line 109 shows where it was called. Line 130 works in a similar fashion.

Within the subroutine, a simple case statement is shown to designate access for various user types. All the TO's and FR's work just like the IF..ELSE..ENDIF; there's just more of them so it looks more complicated.

Working through code like this can be reminiscent of plain old coding: type, "compile" (through PseudoFlow), check for errors, correct, repeat. For the most part, it gets

PseudoFlow
\$99.00 (Indelible Blue: \$79.00)
Adorno Inventions
74671.135@compuserve.com

K-Edit
\$189 (Indelible Blue: \$159)
Mansfield Software Group, Inc

When you make an error, PseudoFlow can generate diagnostics to help you find the bad line. It reports an error, a count of keywords (certain counts should match), a block flow report, then the original code. However, the format, although fairly specific, may not point out exactly where the error occurred. If I type...

...and run it through PseudoFlow, the diagnostics report will show an unmatched ELSE when the error is actually a misspelling of ENDIF. In the count section of the diagnostic report, the counts show an unequal number of IFs and ENDIFs.

Other tools merge multiple pseudocode files, and convert the pseudocode into "code stubs," ladder diagrams, and zone diagrams. Converting to C code is provided in the package. Other languages can be added by defining the PseudoFlow-to-language keyword conversion and using another utility program. Ladder diagrams can be generated to aid in creating user documentation. Zone diagrams show what conditions must be true in order for certain lines to be reached. It's a nice way to see how a line of code is reached, without manually tracing all the paths.

PseudoFlow integrates with a text editor called K-Edit. Instead of exiting your editor and reloading the flow, you do everything under K-Edit. For this review, Mansfield Software Group, Inc., the developers of K-Edit, provided me with a copy of the software so I could see how it worked.

use the diagnostics. It also refreshes the screen when complete so you always see the latest code. Unlike the command line version, the new pseudocode is not saved until you save the file in K-Edit.

A toolbar and a help bar are integrated into K-Edit to keep certain items at your finger- and mouse-tips. Most standard K-Edit commands remain available, except ones that conflict with PseudoFlow keywords.

My one gripe with the integration is the down cursor key. Instead of scrolling down through the pseudocode when the bottom of the screen is reached, the cursor wraps to the top of the screen. This behavior is different than K-Edit without PseudoFlow add-

I find PseudoFlow to be an extremely valuable tool, and I'll continue to use it. The integration with K-Edit was nice, but I found it somewhat overpowering; you don't need an editor that powerful to use PsuedoFlow. PseudoFlow works very nicely with Mr. Ed, and you can add the PseudoFlow keywords and symbols to its MED.SYN file for automatic highlighting. ☺

Richard Knapp is a consultant employed by Oxford and Associates. He can be reached at richfk@ibm.net

```

101      GOTO "Login User" <109>

102      Login User Return: <130>
109      Login User: <101>
110      Show login screen
111      Validate User ID/Password Pair
112      IF <127> User valid
113          CASENTRY <126> User Type
114              System Administrator <118>
115                  Manager <120>
116                      User <122>
117                          Other <124>
<FR 114>
118          CASE <126> System Administrator
119              grant full system access

<TO 126>

<FR 115>
120      CASE <126> Manager
121          grant report generation access

<TO 126>

<FR 116>
122      CASE <126> User
123          grant working access

<TO 126>

<FR 117>
124      CASE <126> Other
125          grant no access
126      ENDCASE <113> User Type

<FR 119>

<FR 121>

<FR 123>

127      ELSE <129>
128          User is not valid
129      ENDIF <112>

130      GOTO "Login User Return" <102>

```

```

# : \programs\prow\test_flow
Line#          Col=1      Size=95      Rlt=0,9,0
ESP=Reset      SETI D1A2 VB13 U01D04      HLP5 Q0116 H87 R#8      SAV9 C1110 BDD1 RFF12
*** Top of File ***
100 BEGIN *100* Main Program
101      GOTO *Login User: *109*
102      Login User Return: *132*
103      IF *105* Login Valid
104          Show main screen
105      ELSE *107* Login not valid
106          Show error screen
107      ENDIF *103*
108      END *100* Main Program
109      Login User: *101*
110      Show Login screen
111      Validate User ID/Password Pair
112      IF *127* User valid
113          CSENTRY *126* User Type
114              System Administrator *118*
115              Manager *120*
116              User *122*
117              Other *124*
118      CASE *126* System Administrator
119          grant full system access
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Simplicity for Java

by Armin Schwarz

review

I'm generally content with technology once I've learned it, especially programming methods. But Data Representation's Simplicity for Java, a rapid application design tool for Java, caught my attention, so I took the challenge to write a review. Part of my purpose was to learn what the Java hype is all about. I must admit that I had not tried any Java applications or Java programming before I looked at Simplicity.

Simplicity is a tool for developers and Web designers. Written entirely in Java, Simplicity lets you interactively design Java applications and applets. As I found out, it also serves as a great Java tutor.

The Java basics

Java applications are compiled programs, also called classes, which run on any operating system which supports the Java Virtual Machine (JVM). Applets are generally small programs, but must be run from within a Java-enabled browser like Netscape or Sun's HotJava.

Simplicity requires the Java Development Kit (JDK) version 1.1 or later. Recommended minimum requirements are a 133 MHz Pentium with 32 MB of RAM and a 800x600 display. I evaluated Simplicity on a 200MHz Pentium with 64 MB of RAM, OS/2 Warp 4 (no fix packs) and JDK 1.1.4. This system has a 14" monitor running at a resolution of 1024x768. A faster computer is better, especially with Java programs. For example, to open Simplicity's Integrated Design Environment (IDE) initially took seventeen seconds, and opening a tutorial exercise took ten seconds.

On OS/2, Simplicity requires installation to an HPFS partition. The installation taught me my first Java lesson: case sensitive file names. Simplicity is only available in electronic format. Because of the way my system is set up, the download did not preserve the file name and case. I had to rename the 1.1 MB file so that it could be recognized as a Java self-installable class file using InstallShield for Java.

Simplicity for Java
Single user license: \$89.00

Data Representations, Inc
PO Box 519
Summit, NJ 07902-0519
Phone: 908-918-0396
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www.datarepresentations.com

It's not possible to unzip the archive and look at readme files for installation instructions, as is customary. However, installation instructions are available at Simplicity's Web site; you should save or print them for reference during installation.

After this first problem, installing Simplicity was easy, quick, and hassle free. During my evaluation, Simplicity was updated two times; every refresh required uninstalling the previous version. Uninstalling was also problem free and accomplished by executing a Java uninstall class. It removed the entire program cleanly, but left the registration key, my source code, and tutorials untouched.



I encountered only two installation inconveniences. One was the very tiny window in which the readme file is displayed. I suggest you read it with your favorite text editor, as it contains important information for the various operating systems. Second, the browse button for installing Simplicity into an alternate directory did not work as expected. You must select a file inside the desired directory to continue with the installation. This appears to be a problem with InstallShield rather than Simplicity.

Running Java programs

After installation, I was ready for my second lesson: how to start a Java program from the desktop.

No icon appeared on the desktop after installation of versions prior to 1.01d, which left me wondering if something had gone wrong. The readme called for opening an OS/2 command prompt to execute an included REXX script. This is not a very attractive way to start a frequently used program. Manually creating an object on the desktop to execute the script made it more convenient. The latest version (1.01d) includes a REXX script to create an OS/2 desktop object, and is a much welcomed improvement.

I also installed Simplicity on a Windows 95 system with the Sun JDK 1.1.6. The installation puts several choices of starting Simplicity with the two versions of the Win32 JDK into the Start, Program menu.

Working with the IDE

Simplicity is very similar to other development systems like Vispro/REXX, but for obvious reasons, lacks operating system specific features. It does add new features like just-in-time design, which eliminates the code-compile-test cycle and goes straight from the design to the finished product.

Simplicity for Java's IDE displays file groups along with the actual files. Groups of files can be composer, Java source, Java class, image, sound, text, html, Java beans, and jar/zip files—which can all be part of a project and represent resources to your Java program. Inside the IDE, you manage projects and set the IDE optional preferences like Java compiler, graphics and external text editors, editor font, and so on.

All project management related operations (like create, rename, open, and save) use the pull-down menu or the button bar, and right-clicking on a file name brings up a menu. There's no OS/2-specific conveniences like Alt+left-mouse click to rename objects. Simplicity doesn't support Alt+click since Java programs are reduced to the lowest common denominator in order to run on any system.

The built-in editor uses no keyboard shortcuts. (If you use Simplicity regularly, you'll want to specify your own editor.) Selecting text to edit requires using the mouse, as does accessing the edit menu to cut, copy, or paste. Incidentally, selecting text with the mouse was sluggish on my 200MHz Pentium.

From the IDE, you can open a single or multiple composer file to design your application or applet. The composer consists of a composer window, the object palette, and the application itself. The composer window contains the application's properties and any properties and code attached to the objects in the application window. Events, called listeners, can be activated by any of the parts in your application. A host of actions are available for the listeners, including—just to name a few—a full range of file operations, operating system specific printing services, sending email, and beeping through the multimedia speakers.

The composer also contains Code Sourcerer, to help you compose Java code. You select a series of choices or fill-in values of variables, and the resulting code is displayed in a window. I was able to create Java code very quickly without knowing the syntax; it was a great way to learn Java. While the Code Sourcerer does assist in creating most Java code, like creating variables or open files, I could not find a way to create conditional statements like IF-THEN or loops like DO-WHILE/UNTIL. Although manually typing these in is no big deal after you learn the syntax, it would be a nice enhancement to include these frequently used constructs.

The Object Palette contains Java beans: objects like layouts, check boxes, buttons, and plenty of others. Basic graphical components which are part of the Abstract Windowing Toolkit (AWT) are available. Simplicity also includes its own extended parts; two that stand out are Validated Text

Field and animators. The Validated Text Field accepts user input only in a certain format (such as phone number, date, or zip code format). External beans can also be called up into the object palette. Deleted parts during the design are placed in the recycle bin section of the object palette and are available for later use.

Simplicity for Java compiles the application as you work. You can observe the results as you type. For example, typing the text of a button in the composer window shows the text on the button in real time. Any code attached to an object executes right away, if you click on it in the application window. This may pose a problem at design time, but listener events can be disabled temporarily in the composer window without losing the attached code.

Just a few complaints

Although Simplicity is very stable and never caused me serious troubles, I encountered several little problems.

While you're working on a composer file, Simplicity opens a series of windows. They are conveniently sized, and all windows are easily accessible without repositioning. That's good, because if you do reposition or resize the windows, the information is not retained the next time you open them.

Also, if you open more than one composer file, the recommended 800x600 screen size is too small; even 1024x768 is insufficient on a 14" monitor. The font size of the pull-down menu is also too small, and can't be changed, though you can adjust the font size for the built-in editor.

Simplicity had one problem in compiling code. It allows you to compile the code into an application, applet, or both. I succeeded in compiling the individual types, but compiling both failed. Data Representations acknowledged the problem, and promises a fix in a future release.

I also discovered a minor problem with the OS/2 JDK. The choice fields, which are used extensively in the composer, remain open when selecting other parts. If left open when the notebook page is changed, the choice fields remain open and bleed through to the other page. It is necessary to return to the previous page and close the field to correct the situation. This does not happen with Sun's JDK on Windows 95.

Simplicity includes documentation in HTML and PDF format. Printed in a condensed font, it's about about 40 pages. You'll want to print the manual, as it is an exercise in futility to position the numerous windows for easy access to "help" and "composer." Documentation is brief and sufficient to run the program, but you'll need a Java programming book for serious development. The documentation contains two tutorials, which got me started quickly. After going through one tutorial, I felt very comfortable with Simplicity—and I hadn't even looked at Java syntax before.

On the horizon for Simplicity are an enhanced editor, support for Swing components, expanded JavaBean support and debugging facilities.

Simplicity provides an easy, simple, yet powerful way to create programs for everybody involved with Java programming: beginner or professional. This tool holds true to its name and makes programming with a new language a joy. ☺

Armin Schwarz lives in Salt Lake City, Utah and maintains the Warped Code Cellar at <http://home.att.net/~ASchw>

Java experience

The most frustrating experience in my first encounter with Java was trying to start Java applications under any operating system. Instructions are scarce and usually leave you unable to run Java applications at all. In most cases just typing "java ProgramName" from a command line should work, but the error "ProgramName class or one of its components not found" is all too common.

You can find information for running Java applications under OS/2 at <http://move.to/java> but the instructions have problems. The sample script included at that site uses the "start" command, which starts up a Java console each time. When the Java application is closed, the console remains open and a new one is started the next time, eventually filling up the window list. If the "start" command is left out, the Java console does not show up in the window list but remains running. This isn't ideal in either case, as you have to close any extra consoles. Setting up the CLASSPATH is also critical for Java applications; you'll find information at the listed site as well.

Decks or Desks: which is it?

by John Wubbel

We users think about our "desktop" user interface as being similar to an office desk: a flat surface or plane with objects often found on top of the desk. While my paper shredder is too large to occupy space on my desktop, I have a shredder none the less on my OS/2 desktop. I got rid of the pencil sharpener a long time ago, since my high tech drawing tools never need sharpening.

For some reason, though, in the back of my mind, I feel like my desktop is more of a vertical plane. Possibly it's because the interface we call a window is standard to the applications in use on the desktop, and my display is a flat panel or vertical plane.

Often times, users lose things on their desktop, as though objects are less stationary on a vertical plane than on a horizontal plane. Sometimes if the problem is severe enough, we have to remake the desktop or restore it from a backup.

I sometimes think of my desktop more as a deck, because decks are horizontal. That does not mean to say it is not always level or it does not have edges. Things can still roll off. Aircraft carriers have decks: a unique interface, platform, or system to accommodate the business of landing or launching aircraft, as well as parking and servicing the equipment. Like a deck on the back of a house, it seems like objects can be nailed down like locking an icon to a fixed location on the desktop.

While it may seem unconventional to think about your user interface as a type of deck, it never hurts to contemplate contrary ideas alongside the context of standard user interfaces. It seems more interesting than arguing with friends over my "my desktop is better than yours." The time passed arguing might be more prevalent with the advent of object oriented or highly customizable interfaces, even though friends happen to use the same operating system. In fact, some of the OS/2 desktop enhancement products on the market today probably required some off-the-wall thinking and research. That is what sets them apart in terms of usability for a wider audience.

Other companies in various industries that use operating system products have, at times, gone to great expense to utilize the desktop for a variety of reasons. Foremost is the idea of increasing productivity and ultimately beating competition. Others simply want to control the desktop. As an example of just how far a company will go, ING Bank in the Netherlands actually subclassed the Workplace Shell to build their own desktop interface. More than likely, they not only wanted to control the experience for their end-users in terms of presentation, but they probably gained a degree of security in doing so.

Companies across the United States have leveraged the flexibility of the OS/2 desktop by building proprietary desktops that often disguise OS/2. When I last checked, Toyota was building a unique desktop for their dealers, Travelers Group for their agents, and Novus Network Services invented its own navigator menu that served up certain subsets of applications to various business segments.

This idea is more embodied in the WorkSpace on Demand model. The bank teller boots the local workstation from a server and gets a desktop that has been specially engineered to allow him to conduct business with customers. The branch manager boots from the server as well, however her desktop is tailored to the needs of a manager instead. Most of the time, WorkSpace on Demand is advertised as the thin client or network centric paradigm, because that might sell more IBM technology. Businesses, however, look at it from an office systems perspective.

Back at home

My deck is built with two-by-fours, planks, and 10 penny nails. There is a big flower pot in the corner, a hammock near the bird feeder, and a diving platform in front of the pool. The deck is connected to the house and is an integrated system for relaxation.

Once we stop thinking so selfishly about our own desktops, the notion of my desktop being connected to your desktop and how that would be a benefit leads us to networking and virtual offices. The virtual office could be thought of as an extension of "our desktop." I might have a really useful object or resource that is occasionally useful to you. I might not argue so strongly that my desktop is better than yours because I want you to share your resource with me. A Java applet might be such a resource that can be shared and enhance the pleasure of using a computer.

Office systems are often engineered for specific vertical industries. For example, today's typical medium size medical practice probably has a choice of a hundred different software systems, applications, and configurations to manage the back office and insurance processing. Each of these is very costly and promises vast savings. Physician practice management firms spend big bucks developing in-house software to make them more competitive. It would seem that, given the nature of medical practices, more commonality across practices with regard to office systems would be prevalent. But the opposite is true.

Okay, so not all practices are alike. Let's take a specific group, such as pediatricians. As a group, you might think they have similar requirements. Capitation does not work

for well-baby visits from birth to 2 years of age, which is unlike general practices. In general, the office systems would be very similar from one pediatric practice to the next. On the whole, pediatric practices as an entity do not seem to have a standard in terms of a common office system. And, it is likely the case for other medical practices since many software office systems on the market try to sell on the basis that "one size fits all." A development company won't cater to one niche market practice. Rather, it caters to the entire medical community in order to increase sales volumes. Plus, medical offices in the past not only had to buy the software, but the hardware as well, based upon the hardware requirements as set forth by the software manufacturer. And oh, by the way, these systems have a limited lifetime.

Back at the desktop

This could eventually change with the advent of Java applications in the context of the virtual office. A common office system might come together for vertical markets, with specialty practices as objects accepted or rejected in the market place based on usefulness. Hardware requirements become less of a burden.

I neither want to nail something down hard on my deck, nor do I want something to fall off my desktop. Maybe I should call it an object palette. Whatever, the flexibility and customization of objects that make up an office system will not be as hard wired as they are today.

The object palette would take away any argument over one desktop configuration being "better than another" because end-users would have the freedom to choose the components that add the most value to the system. An office system standard could gel without a major point blank IS development initiative.

How can this be? Well, how many different applets does a doctor need in order to write a prescription? Most doctors could get by on one well written applet, regardless of

the type of practice. But a few doctors may only treat patients with cystic fibrosis! Therefore, an object to document these patients is appropriate for this set of specialists. A general practitioner would rarely have a need to document the encounter with a cystic fibrosis patient, which illustrates a departure from "one size fits all" and actually decreases implementation complexity.

Given the fact that we use models to represent interfaces for such things as desktops, as we use them our mental concept or notion may actually become modified. The human centric interface of a window without controls have been experiments in usability whereby it forces you to think outside of the standard realm of today's traditional user interfaces. This exercise can be healthy for software engineers embarking upon the development of new office systems. ☺

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Professor Twiddle's College of Object Rexx Knowledge

by John J. Urbaniak

Hello. I am Professor Twiddle. I would like to teach you more about Object Rexx.

In the July issue of *extended attributes*, I introduced the Array Class. This time, I'll talk about the Queue Class.

Before you get started, make sure your OS/2 system is set up for Object REXX. Refer to the previous article for instructions.

The Queue class

In our last article, we stated that the Array Class is well suited to objects with some kind of "sequentialness."

The Queue Class is also for objects that have a "sequential" property, in the sense that the objects have a natural order, from the beginning to the end of the queue.

With the Array Class, you enter the objects using an integer array index. But with the Queue Class, you specify that a new object is to be entered either at the *end* of the other objects or at the *beginning*. All the other objects are "pushed down" the queue, and the new one is placed at the top.

Important built-in methods for the Queue Class are:

- ☐ QUEUE: add an object to the end of the queue
- ☐ PUSH: add an object to the beginning of the Queue
- ☐ PULL: return the first object in the queue, move up all the other objects.
- ☐ MAKEARRAY: returns an array consisting of the objects in the queue, from the top to the end.
- ☐ ITEMS: returns the number of objects currently in the queue.



Use the OS/2 System Editor to type in the program in Listing 1.

Save it as `queue.cmd` in your Twiddle folder, and exit the editor. Then, drag the `queue.cmd` icon on the `PMREXX.EXE` icon to run the program. Examine the output, and compare it with your program statements to get a good understanding of the methods of the Queue class. If you made mistakes, fix them and try again.

A closer discussion

As we said, the Queue class is well suited to objects which have some kind of "sequentialness" like arrays. But queues are also very well suited to objects that have some sense of priority. Such objects occur in everyday life, from the line at the doctor's office to the sequence of airplanes waiting to taxi to the runway and take off.

The last section of the code example illustrates an extremely important and powerful feature of (Object) Rexx, the INTERPRET statement.

INTERPRET reads a Rexx string or variable, into which an executable command has been stored, and executes the command, right on the spot. This can be very useful in process control applications, and in many other applications. It gives a program the ability to modify its own execution sequence.

In a future lesson, we will discuss Object Rexx's built-in threading capability, for which statements like INTERPRET and classes like Queue can be put to very good use.

Did you notice that we didn't have to predefine the number of elements in our queues? Object Rexx takes care of that for us. We can add additional elements to existing queues, at the "top" or the "bottom" as we wish. No calls to malloc. No hassles.

Also, the type of objects don't matter in a queue. We can store characters, numbers, and even other objects, such as other arrays, queues, or executable statements.

And we can do it so easily.

Professor Twiddle has never seen another language which is as powerful, as flexible, and as easy to learn and use as is Object Rexx.

Unfortunately, IBM hasn't a clue how to market this remarkable language. An IBM executive who shall remain nameless has stated that "Object Rexx is just a Scripting language!" He is so wrong. ☹

Listing 1: Working with queues

```
/* Queue.CMD - the Queue class */

/* Queues instead of arrays */

say 'Queues can be easier to work with than arrays.'
/* Here is the 'Standard' way to build an array: */
/* You have to compute the index yourself. */
/* In a small program like this, this is not a */
/* big deal. But in a large program, you */
/* might set the index incorrectly at some */
/* point causing serious problems. */
index = 0
myArray = .array-NEW
do 10
```



```

index = index + 1
myArray[index] = RANDOM(10,100)
end

/* Here is a way to do the same thing with a Queue */
/* Note that there is no index to worry about. */
myQueue = .queue-NEW
do 10
    myQueue-QUEUE(RANDOM(10,100))
end
/* This statement makes an array from a Queue */
myQArray = myQueue-MAKEARRAY

do i = 1 to 10
    say i myArray[i] myQArray[i]
end

/* Processing Queues */
say
say 'You can insert items into a Queue either at the'
say 'beginning (PUSH) or the end (QUEUE).'

PriorityQueue = .queue-NEW

do i = 1 to 10
    /* 1 = 'High', 2 = 'Low' Priority */
    priority = RANDOM(1,2)
    if (priority = 1) then PriorityQueue-PUSH('item 'i' = High')
    else PriorityQueue-QUEUE('item 'i' = Low')
end
do while PriorityQueue-ITEMS > 0
    queueItem = PriorityQueue-PULL
    say queueItem
end

say
say 'You can put items into the Queue and'
say '    take them out (PULL them) at'
say '    the same time.'
say 'PULL always takes the first item in the Queue.'

/* You should try different values for limit */
/* and headStart to see the effects on the results */
limit = 15
headStart = 5

do i = 1 to limit
    /* 1 = 'High', 2 = 'Low' Priority */
    priority = RANDOM(1,2)
    if (priority = 1) then PriorityQueue-PUSH('item 'i' = High')
    else PriorityQueue-QUEUE('item 'i' = Low')
    /* get a little head start to simulate reality */
    if (i > headStart) then do
        queueItem = PriorityQueue-PULL
        say queueItem
    end
end
say 'Finish off the remaining items'
do while PriorityQueue-ITEMS > 0
    queueItem = PriorityQueue-PULL
    say queueItem
end
say 'The above process assures that High Priority'
say 'items will be processed first. Low Priority'
say 'items will only be processed if there are '
say 'no High ones in the Queue.'
say

```

say 'Thus there are more Highs at the beginning'
say 'and more Lows at the end.'

```

say
say 'Queue items can be any objects, numbers, text,'
say '    even EXECUTABLE statements!'
say
value = 0
say 'initial value = 'value
do i = 1 to limit
    /* 1 = 'Add to value', 2 = 'Subtract from value' */
    priority = RANDOM(1,2)
    addStatement = "value=value+1;say 'After ADD, value = 'value"
    subStatement = "value=value-1;say 'After SUB, value = 'value"

    if (priority = 1) then PriorityQueue-PUSH(addStatement)
    else PriorityQueue-QUEUE(subStatement)
    /* get a little head start to simulate reality */
    if (i > headStart) then do
        queueItem = PriorityQueue-PULL
        INTERPRET queueItem
    end
end
say 'Finish off the remaining items'
do while PriorityQueue-ITEMS > 0
    queueItem = PriorityQueue-PULL
    INTERPRET queueItem
end
say 'final value = 'value

```



OS/2 Fixpaks on CD-ROM

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New and improved

by Esther Schindler

One of these days, I'll start a monthly graph of OS/2 software releases. I could swear that these things come in in waves. Sure, we have a steady stream of utilities, but there always seems to be a hiccup in new or updated games one month, developer tools the next, and home applications the month after that. I wonder why?

I'd better remind you that the software described in this column are announcements only. I have no idea if they live up to their promises—but you can help the entire OS/2 community find out by writing a review. Contact the reviews editor to wheedle and plead, and he'll make the proper arrangements.

Hopkins: FBI for OS/2 4.0

Help Hopkins battle terrorists!

A criminal organization, headed by the infamous terrorist Bernie Berckson, had gained nuclear missiles, and threatened the US government. If their demands weren't met, they intended to launch the weapons against civilian targets. As the US government stubbornly refused to negotiate, the two missiles were launched on California, causing untold casualties.

Two years later, Berckson was captured by Special Agent Hopkins. Sentenced to death, Berckson was electrocuted twice. But, inexplicably remaining alive, he managed to escape. Now, Bernie Berckson is leading a new criminal organization. As Special Agent Hopkins, you are to find and arrest him and anyone belonging to his gang.

(Due to the adult nature of some scenes within this game, parents should exercise caution before allowing minors to play.)

Drawn by cartoon specialists according to the rule book. The images in Hopkins: FBI were scanned and meticulously retouched frame by frame to produce high-quality scenes.

See www.polyex.com for more information.



Priority Master II

Priority Master II 2.4 provides dynamic prioritization for OS/2 PM programs, automatic priority update in the target main window and CTRL+Esc Task List—and the proverbial “more!” A full list of features is at www.prioritymaster.com.

WPTools 2.3

WPTools is a collection of OS/2 specific tools. A subset

includes:

- ☐ CHECKINI: Checks Workplace Shell settings in the OS2.INI and OS2SYS.INI. CHECKINI is intended to keep INI files clean and relatively small, ensuring the best WPS performance.
- ☐ WPSBKP: Make a backup of most workplace shell objects in a text file. This text file can be used to restore a customized WPS after the desktop has been reinstalled or to port parts to another machine. The companion WPSREST restores a backup made with WPSBKP.
- ☐ RESETWPS: Resets the WPS without rebooting.
- ☐ WPTOOLS.DLL: A dynamic link library that, among other things, can be used from REXX to query object settings. This DLL is also used by WPSBKP to query object settings. This may be the only tool in the world that queries setup strings.

You'll find more information at www.os2ss.com/information/ke1der.

File Commander/2

File Commander/2 1.51 is a 32 bit text mode file manager and shell that allows you to locate, copy, move, delete, view, edit, and execute files.

To download a shareware version, visit www.btsoftware.com.

MRSR 2.0

Multiple Recursive Search and Replace (MRSR) is a command line utility to search and replace inside text files. MRSR isn't limited to a single file at a time, or to a single search and replace at one time. This utility allows you to search multiple files and to perform a virtually unlimited number of search and replace operations at once.

MRSR also does block searches, and can traverse an entire subdirectory tree. MRSR allows updates to Web pages and source code. Version 2 uses English-like commands, rather than version 1's obscure single letter commands.

To download a shareware version visit www.bossi.com/utility/mrsr/mrsr.html.

NFTP 1.3

nftp 1.30 is an FTP client offering fast text mode operation, bookmarking, fully scrollable remote directory view, tagging, caching remote directories, descriptions, one-key viewing remote files, sorting by date/name/size, transfer progress indicator, firewall support, and more. It has built-in support for sixteen languages.

Registration: \$20. Available at BMT Micro.

WSSFill

WSSFill is a utility for copying files to floppy with minimal wasted space. It's written in REXX, with DrDialog providing a graphical interface. If the source files have long names, the copied files get abbreviated names, but the original names are preserved as extended attributes. The space calculations include the "EA DATA.SF" file that OS/2 creates to hold the EAs.

WSSFill has the option to move files to another directory after they have been copied. The program can be downloaded from www.gis.net/~wssddc/links/otherware.html.

The author comments, "If I get positive response, I'll send it to Hobbes. It's shareware, with a \$7.50 registration fee. It is not crippled in any way, and source code is included (DrDialog needed). I've only tested it under Warp 4, but I think it should work on older versions as long as REXX support is installed."

AFP Font Collection

The IBM AFP Font Collection provides a comprehensive set of fonts and utilities to enable consistent printing on AFP printers in any IBM system environment. Version 2 includes new international language capabilities to support printing in global markets:

- ☐ Support for the euro currency symbol and code pages
- ☐ Support for printing in Thai and Lao
- ☐ Support for the New Sheqel Sign in Hebrew
- ☐ Enhanced code page support for Cyrillic, Hebrew, Katakana, Latin2, and APL
- ☐ Addition of "g-cedilla" to all Latin4 Core Interchange fonts
- ☐ Full GBK support for Chinese, and full Hangul support for Korean with the Outline Fonts and Programs feature.

The IBM AFP Font Collection provides a comprehensive set of fonts and utilities to give you consistent printed output on AFP printers at 240 or 300 dpi, or on any printer that uses AFP outline fonts. It also provides compatible Type 1 and CID keyed outlines that allow you to view your AFP documents in Windows 95, Windows NT, or OS/2, or via the Netscape or Internet Explorer browsers with WYSIWYG fidelity. The fonts can be installed in any IBM operating system environment.

The AFP Font Collection supports printing in approximately forty-six languages.

The Type Transformer optional program enables you to acquire outline fonts in any typeface of your choice and create AFP fonts in raster format, or in AFP outline font format.

Version 2 of the AFP Font Collection includes new international language capabilities to support print requirements for global markets. AFP Font Collection is intended for any AFP customer who requires:

- ☐ Consistent font support on printers with different resolutions
- ☐ Print and view fidelity for AFP documents
- ☐ Printed output with the new euro currency symbol
- ☐ Ability to customize AFP fonts.

The AFP Font Collection can be installed in any supported IBM operating system. Media features are available for upload to OS/400 from OS/2, or for direct installation in AIX, OS/400, or OS/2.

To order, contact your IBM representative, an IBM business partner, or IBM North America Sales Centers at 800-IBM-CALL. Reference: YE010

QuickCam Viewer for OS/2

The QuickCam Viewer is a shareware multifunction viewer for the Connectix QuickCam, supporting color and grayscale cameras.

The QuickCam Viewer's native 32-bit OS/2 support consists of a device-driver and a PM application. Features include:

- ☐ Auto-detect parallel port and port-capabilities.
- ☐ Access to camera controls via sliders.
- ☐ B&W image enhancement with gamma-corrected palette on slider.
- ☐ Low-light filter for speck removal on color cameras.
- ☐ Auto-exposure calibration.
- ☐ Any portion of the image can be selected for viewing.
- ☐ Image can be stretched to fill entire picture window.
- ☐ Can save images as BMP or JPEG file, copied to the

clipboard or printed.

- ☐ Supports drag 'n drop: picture can be dragged from the viewer.
 - ☐ Custom text or date and time stamps on saved images.
 - ☐ Desktop Lockup support: Use a live picture for a screen-saver.
 - ☐ Online context-sensitive help.
- You'll find the file on Hobbes as QV2-200.ZIP.

A support DLL is available to developers, which provides full camera control. Anything the QuickCam Viewer can do is available using the APIs provided.

It's available from www.2d3d.com and www.cix.co.uk/~e1ad/qv2.htm.

For technical feedback and ordering information in Europe, contact Dale Whitfield at qv2@e1ad.cix.co.uk.

For release dates, ordering information and the Developers Edition in the USA, contact Senja Petrujkic at senja@2d3d.com

For more information on the Connectix QuickCam, visit Connectix at www.connectix.com. (Note that Connectix just sold the product line to Logitech.)

NUT

NUT is a free application that lets you record and analyze meals according to the USDA nutrient database.

The database contains 5,976 foods and their composition in terms of calories, protein, carbohydrates, fiber, total fat, saturated fat, monounsaturated fat, polyunsaturated fat, and cholesterol; vitamins A, thiamin, riboflavin, niacin, pantothenic acid, B6, folate, B12, C, and E; minerals calcium, copper, iron, magnesium, manganese, phosphorus, potassium, selenium, sodium, and zinc; and the essential fatty acids, linoleic and linolenic. The program is com-



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pletely menu-driven; there are no commands to learn. You may add your own recipes to the database.

NUT available on Hobbes as nut-os2.zip, and is expected to be found at <http://hobbes.nmsu.edu/pub/os2/unix/apps/nut-os2.zip>. Requires EMX runtime 0.9c.

PM-Lotto

PM-Lotto 1.1 is a free Lotto Generator for system 6 from 49 and 6 from 37. It's a PM application which features a triple-pass randomizer for pulling the 6 numbers. You can pull a complete sheet of 12 games or a single game. You can save your game sheet in simple ASCII format. English and German user interface. Available at OS/2 Central on CompuServe.

InJoy 2.0b

F/X Communications announced InJoy 2.0b. InJoy is known as the ever-expanding Internet Dialer that, with its mission critical appearance, unmatched performance, and powerful features brought unique Internet connectivity to OS/2.

For the past year, F/X has been busy designing and coding the new release. To avoid the dinosaur syndrome, F/X took the time to modularize the many features of InJoy. The new design promises continued low resource-usage, an expansion-friendly kernel, easier testing, and superior module interoperability, simplifying the release of new F/X products.

Version 2.0b includes an F/X Firewall Plugin, F/X Packet Filter Plugin, TCP/IP 4.1 support, new Dial On Demand, NAT support for IRC SEND/DCC, NAT support for PING, a new registration scheme, and a new home page.

The F/X firewall plugin transforms InJoy into a full-featured firewall by using rule based access control, network address translation, port and IP redirection, packet filtering, alerts, accounting, stateful inspection, and logging.

The F/X packet filter selectively filters TCP/IP packets as they flow through the plugin. Use it to fine-tune Dial On Demand, block porn, or block certain protocols or packet contents. Create powerful compound filters, literally addressing any packet characteristic down to the last bit.

InJoy is now available in four registration levels.

Basic client: \$30. Old "Basic Clients" have expired. You need to reregister to be able to use version 2.0b or newer.

Extended client: \$40. Old registration codes are still valid.

SOHO client: \$85. Introduces very powerful features such as the F/X Firewall Plugin, Packet Filter Plugin, and support for twelve users.

Professional Client/Server: \$150. Old registration codes are still valid. Ask F/X Communications for a new version (including the F/X Firewall and F/X Filtering).

InJoy Support: support@fx.dk

Upgrade questions: bmt@bmtmicro.com

InJoy Home Page: www.fx.dk/injoy

InJoy Mail List: www.fx.dk/contadd.html

Memory Game

Memory Game 1.5 is an OS/2 card matching game with beautiful, 300 dpi, 256-color images of dinosaurs, birds, wild animals, farm animals, and fish. The game has been enhanced with multimedia sounds and now plays on most screen resolutions. It's suitable for small children, but adults enjoy playing it too.

Memory Game can be found at <http://home.att.net/~ASchw/homeapps.html>.

mSQL for OS/2

mSQL is a lightweight relational database server, which is very popular as a back-end for Web sites. Third party support for Java, REXX, and Sibyl is also available.

The mSQL 2.0.4.1 for OS/2 reached production status with the latest build just released. You can download it from The mSQL PC Home Page (www.b1net.com/msqlpc) or from The OS/2 NetLabs (www.netlabs.org).

At the OS/2 BBS

The OS/2 BBS (www.os2bbs.com) is among the oldest resources for OS/2 users, and we often forget to mention it in these pages. With well over 10,000 files, the OS/2 BBS has plenty to choose from. Just to give you a taste of what's available, we'll provide a short excerpt of recent files uploaded.

AdeptX BBS for OS/2, full installation. Version 4.2w. www.os2bbs.com/file_f/bbs/ADF42W.ZIP

AWE Web Editor for OS/2 version 0.155b. Advanced Web Editor (no relation to similar named program) is an HTML edi-

tor. Option to assign tags to 432 keys and choose tags from definitions files. Project support added. Popup menus definable. www.os2bbs.com/file_f/internet/AWE0155.ZIP

Battleship game with source code. Based on the board game of the same name. The game consists of two game boards on which the players place five ships and a variable number of mines. www.os2bbs.com/file_f/games/BATTLE.ZIP

VPDART01.ZIP provides sources for using DART and working with WAV files in OS/2. www.os2bbs.com/file_e/tools/VPDART01.ZIP

3D OS/2 on colorful background (1024 x 780). www.os2bbs.com/file_c/bitmap/10240S2.ZIP

Nice/2 is a command line utility to change priorities of threads in OS/2. www.os2bbs.com/file_d/systools/NICE002.ZIP

EWOCam/2 office web camera. www.os2bbs.com/file_d/multimed/EWOCAM11.ZIP


DS13 compares files in directory. www.os2bbs.com/file_d/file/DS13.ZIP

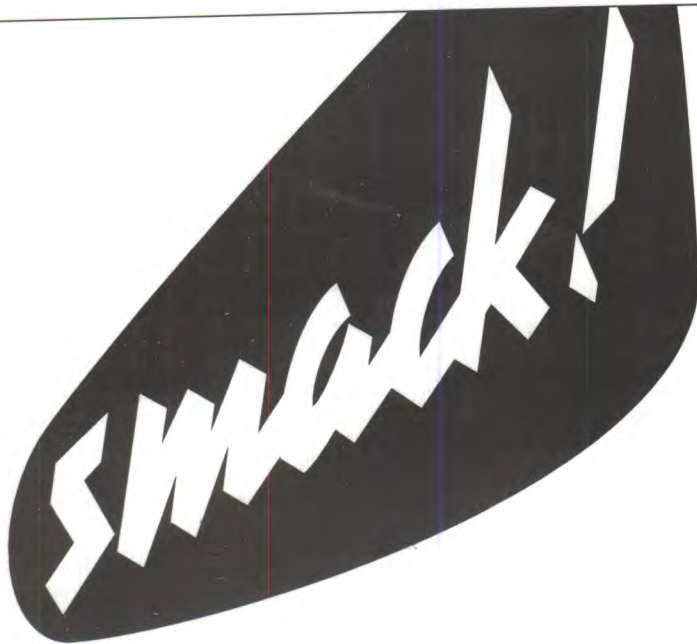
Daytime is a time and daytime server and client programs for OS/2 and Windows NT. www.os2bbs.com/file_f/internet/DAYTIME.ZIP

XE is an editor for the classic shoot 'em up game Xenon 2. www.os2bbs.com/file_f/games/XE1000S2.ZIP

Wallpaper changer. www.os2bbs.com/file_d/wps_pm/WALL312R.ZIP

PMMail Offline Folder/Archive Maintenance Utility. www.os2bbs.com/file_f/internet/POFAMU1A.ZIP

TXT2HTML is a plain text to HTML converter. www.os2bbs.com/file_f/internet/TXT2HTML.ZIP 



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<http://www.warpstock.org> for more information

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